## Spurling, Norman

From:

Steeger, Thomas

Sent:

Friday, March 14, 2014 4:54 PM

To:

Spurling, Norman

Subject:

Bee Kill Incident Report

Attachments:

Beekill Incident report\_Wardell\_California almond (03\_11\_2014).docx

The attached document contains Personally Identifiable Information (PII)

Attached please find a bee kill incident report. If you have any questions or concerns, please let me know.

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On Tuesday, March 11, 2014, a bee kill incident was reported to the Environmental Fate and Effects Division of the EPA Office of Pesticide Programs. A bee biologist for Paramount Farming Inc., accompanied a bee broker to evaluate honey bee colony losses on contract to Paramount Farming for pollination services in their almond orchards in Kern County, California. According to the biologist, affected colonies had been reduced from 12 -14 frame averages to 4 - 5 frame averages, indicating a loss of both adult forage and hive bees. He attributed the losses to the use of the insecticide Tourismo® (flubendiamide and buprofezin) tank mixed with fungicide Tilt® (propiconazole) during full bloom to orchards operated by the adjacent grower The biologist described the bee loss as consisting of a lot of dead bees (not piles), primarily immature brood and partially-emerged bees with their proboscis extended (Figures 1-3). Dead adult bees were reported observed all along the roads between bee hives. The loss was observed between March 3 - 4, 2014. At that time, adult bees were continuing to eject dead brood from the colonies. Roughly 70% of the colonies in the area were affected representing between 100 - 170 hives. According to the biologist, the beekeeper is providing supplemental feed to rebuild colony strength in the affected colonies; the colonies are reported to appear as though they are recovering as the queen is laying down brood. The biologist expressed concerns to the Almond Board regarding the loss from the use of pesticides at bloom by almond growers while bees are foraging; in response, the Almond Board indicated that they would look into the matter. The biologist for Paramount Farming was unclear whether the affected colonies were registered with the County Agricultural Commission (CAC) office; however, the CAC office responded that the products used were legal.

Contact: Dr. Gordon Wardell

Bee Biologist

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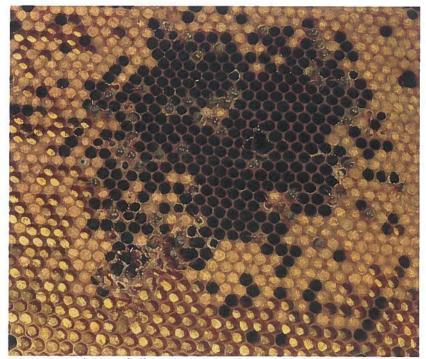


Figure 1. Brood comb of affected hive showing partially emerged bees. Photo by G. Wardell.



Figure 2. Dead bees at entrance of affected hive. Photo by G. Wardell.



Figure 3. Close-up of dead bees collected from entrance to affected hive depicting young, newly emerged bees and pupae. Most bees had an extended proboscis. Photo by G. Wardell.